

Sequence Listing

SEQUENCE LISTING

<110> Steinkasserer, Alexander

<120> Use of Soluble Forms of CD83 and Nucleic Acids Encoding them for the Treatment or Prevention of Diseases

<130> 032723woJH

<140>

<141>

<160> 12

<170> PatentIn Ver. 2.1

<210> 1

<211> 618

<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (1)..(615)

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gct ccc gcg acg ccg gag gtg aag gtg gct tgc tcc gaa gat gtg gac 96
Ala Pro Ala Thr Pro Glu Val Lys Val Ala Cys Ser Glu Asp Val Asp
20 25 30

ttg ccc tgc acc gcc ccc tgg gat ccg cag gtt ccc tac acg gtc tcc 144
Leu Pro Cys Thr Ala Pro Trp Asp Pro Gln Val Pro Tyr Thr Val Ser
35 40 45

tgg gtc aag tta ttg gag ggt ggt gaa gag agg atg gag aca ccc cag 192
Trp Val Lys Leu Leu Glu Gly Gly Glu Glu Arg Met Glu Thr Pro Gln
50 55 60

gaa gac cac ctc agg gga cag cac tat cat cag aag ggg caa aat ggt 240
Glu Asp His Leu Arg Gly Gln His Tyr His Gln Lys Gly Gln Asn Gly
65 70 75 80

tct ttc gac gcc ccc aat gaa agg ccc tat tcc ctg aag atc cga aac 288
Ser Phe Asp Ala Asn Glu Arg Pro Tyr Ser Leu Lys Ile Arg Asn
85 90 95

act acc agc tgc aac tcg ggg aca tac agg tgc act ctg cag gac ccg 336
Thr Thr Ser Cys Asn Ser Gly Thr Tyr Arg Cys Thr Leu Thr Asp Pro
100 105 110

gat ggg cag aga aac cta agt ggc aag gtg atc ttg aga gtg aca gga 384
Asp Gly Gln Arg Asn Leu Ser Gly Lys Val Ile Leu Arg Val Thr Gly
115 120 125

tgc cct gca cag cgt aaa gaa gag act ttt aag aaa tac aga gcg gag 432
Cys Pro Ala Gln Arg Lys Glu Glu Thr Phe Lys Lys Tyr Arg Ala Glu
130 135 140

att gtc ctg ctg ctg gct ctg gtt att ttc tac tta aca ctc atc att 480
Ile Val Leu Leu Leu Ala Leu Val Ile Phe Tyr 155
145 150 160

ttc act tgt aag ttt gca cgg cta cag agt atc ttc cca gat ttt tct 528
1

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Sequence Listing

Phe Thr Cys Lys Phe Ala Arg Leu Gln Ser Ile Phe Pro Asp Phe Ser
165 170 175

cat tta ggg cta gtg act cct cac aag aca gaa ctg gta tga 618
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<212> PRT
<213> Homo sapiens
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Ala₂₀ Pro₂₀ Ala₂₀ Thr₂₀ Pro₂₀ Glu₂₀ Val₂₀ Lys₂₅ Val₂₅ Ala₂₅ Cys₂₅ Ser₂₅ Glu₃₀ Asp₃₀ Val₃₀ Asp₃₀
Leu₃₅ Pro₃₅ Cys₃₅ Thr₃₅ Ala₃₅ Pro₃₅ Trp₄₀ Asp₄₀ Pro₄₀ Gln₄₀ Val₄₀ Pro₄₅ Tyr₄₅ Thr₄₅ Val₄₅ Ser₄₅
Trp₅₀ Val₅₀ Lys₅₀ Leu₅₀ Leu₅₀ Glu₅₅ Gly₅₅ Gly₅₅ Glu₅₅ Glu₅₅ Arg₆₀ Met₆₀ Glu₆₀ Thr₆₀ Pro₆₀ Gln₆₀
Glu₆₅ Asp₆₅ His₆₅ Leu₆₅ Arg₇₀ Gly₇₀ Gln₇₀ His₇₀ Tyr₇₅ His₇₅ Gln₇₅ Lys₇₅ Gly₇₅ Gln₈₀ Asn₈₀ Gly₈₀
Ser₈₅ Phe₈₅ Asp₈₅ Ala₈₅ Pro₈₅ Asn₈₅ Glu₈₅ Arg₉₀ Pro₉₀ Tyr₉₀ Ser₉₀ Leu₉₀ Lys₉₅ Ile₉₅ Arg₉₅ Asn₉₅
Thr₁₀₀ Thr₁₀₀ Ser₁₀₀ Cys₁₀₀ Asn₁₀₀ Ser₁₀₀ Gly₁₀₅ Thr₁₀₅ Tyr₁₀₅ Arg₁₀₅ Cys₁₁₀ Thr₁₁₀ Leu₁₁₀ Gln₁₁₀ Asp₁₁₀ Pro₁₁₀
Asp₁₁₅ Gly₁₁₅ Gln₁₁₅ Arg₁₁₅ Asn₁₁₅ Leu₁₁₅ Ser₁₂₀ Gly₁₂₀ Lys₁₂₀ Val₁₂₀ Ile₁₂₅ Leu₁₂₅ Arg₁₂₅ Val₁₂₅ Thr₁₂₅ Gly₁₂₅
Cys₁₃₀ Pro₁₃₀ Ala₁₃₀ Gln₁₃₀ Arg₁₃₅ Lys₁₃₅ Glu₁₃₅ Glu₁₃₅ Thr₁₃₅ Phe₁₄₀ Lys₁₄₀ Lys₁₄₀ Tyr₁₄₀ Arg₁₄₀ Ala₁₄₀ Glu₁₄₀
Ile₁₄₅ Val₁₄₅ Leu₁₄₅ Leu₁₄₅ Leu₁₅₀ Ala₁₅₀ Leu₁₅₀ Val₁₅₀ Ile₁₅₅ Phe₁₅₅ Tyr₁₅₅ Leu₁₅₅ Thr₁₅₅ Leu₁₆₀ Ile₁₆₀
Phe₁₆₅ Thr₁₆₅ Cys₁₆₅ Lys₁₆₅ Phe₁₆₅ Ala₁₆₅ Arg₁₇₀ Leu₁₇₀ Gln₁₇₀ Ser₁₇₀ Ile₁₇₅ Phe₁₇₅ Pro₁₇₅ Asp₁₇₅ Phe₁₇₅ Ser₁₇₅
Lys₁₈₀ Ala₁₈₀ Gly₁₈₀ Met₁₈₀ Glu₁₈₀ Arg₁₈₅ Ala₁₈₅ Phe₁₈₅ Leu₁₈₅ Pro₁₈₅ Val₁₈₅ Thr₁₉₀ Ser₁₉₀ Pro₁₉₀ Asn₁₉₀ Lys₁₉₀
His₁₉₅ Leu₁₉₅ Gly₁₉₅ Leu₁₉₅ Val₁₉₅ Thr₂₀₀ Pro₂₀₀ His₂₀₀ Lys₂₀₀ Thr₂₀₀ Glu₂₀₅ Leu₂₀₅ Val₂₀₅

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<210> 3
<211> 2051
<212> DNA
<213> Mus musculus
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Sequence Listing

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<222> (14)..(601)

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gcc tgc agc ctg gca ccc ggc atg gcg atg cgg gag gtg acg gtg gct 97
Ala Cys Ser Leu Ala Pro Ala Met Ala Met Arg Glu Val Thr Val Ala 15 20 25

tgc tcc gag acc gcc gac ttg cct tgc aca ggc ccc tgg gac ccg cag 145
Cys Ser Glu Thr Ala Asp Leu Pro Cys Thr Ala Pro Trp Asp Pro Gln 30 35 40

ctc tcc tat gca gtg tcc tgg gcc aag gtc tcc gag agt ggc act gag 193
Leu Ser Tyr Ala Val Trp Trp Ala Lys Val Ser Glu Ser Gly Thr Glu 45 50 55 60

agt gtg gag ctc ccg gag agc aag caa aac agc tcc ttc gag gcc ccc 241
Ser Val Glu Leu Pro Glu Ser Lys Gln Asn Ser Ser Phe Glu Ala Pro 65 70 75

agg aga agg gcc tat tcc ctg acg atc caa aac act acc atc tgc agc 289
Arg Arg Arg Ala Tyr Ser Leu Thr Ile Gln Asn Thr Thr Ile Cys Ser 80 85 90

tcg ggc acc tac agg tgt gcc ctg cag gag ctc gga ggg cag cgc aac 337
Ser Gly Thr Tyr Arg Cys Ala Leu Gln Glu Leu Gly Gly Gln Arg Asn 95 100 105

ttg agc ggc acc gtg gtt ctg aag gtg aca gga tgc ccc aag gaa gct 385
Leu Ser Gly Thr Val Val Leu Lys Val Thr Gly Cys Pro Lys Glu Ala 110 115 120

aca gag tca act ttc agg aag tac agg gca gaa gct gtg ttg ctc ttc 433
Thr Glu Ser Thr Phe Arg Lys Tyr Arg Ala Glu Ala Val Leu Leu Phe 125 130 135 140

tct ctg gtt gtt ttc tac ctg aca ctc atc att ttc acc tgc aaa ttt 481
Ser Leu Val Val Phe Tyr Leu Thr Leu Ile Ile Phe Thr Cys Lys Phe 145 150 155

gca cga cta caa agc att ttc cca gat att tct aaa cct ggt acg gaa 529
Ala Arg Leu Phe Ser Ile Phe Pro Asp Ile Ser Lys Pro Gly Thr Glu 160 165 170

caa gct ttt ctt cca gtc acc tcc cca agc aaa cat ttg ggg cca gtg 577
Gln Ala Phe Leu Pro Val Thr Ser Pro Ser Lys His Leu Gly Pro Val 175 180 185

acc ctt cct aag aca gaa acg gta tgagtaggat ctccactggt ttttacaag 631
Thr Leu Pro Lys Thr Glu Thr Val 190 195

ccaaggcac atcagatcag tgtgcctgaa tgccaccgg acaagagaag aatgagctcc 691

atcctcagat ggcaaccttt ctttgaagtc cttcacctga cagtgggctc cacactactc 751

cctgcacacg ggtcttgagc accatcatat gatcacgaag catggagtat caccgcttct 811
Page 3

Sequence Listing

ctgtggctgt cagcttaatg ttctatgtgg ctatctggtc aacctcgtga gtgcttttca 871
gtcatctaca agctatggtg agatgcaggt gaagcagggt catgggaaat ttgaacactc 931
tgagctggcc ctgtgacaga ctcttgagga cagctgtcct ctctacatc tgggatacat 991
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gacaggccaa gctgtgagcc agtgggaaat atttagcaaa taatttccca gtgcgaaggt 1111
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caagcagcct gagagaagat ggagaatgt cctcaaata gggacagcaa gctagaagca 1411
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taattgagctg ggtctcttcc tcatttgctt cccaaagaga tttgtccca ctaatggtgt 1951
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<213> Mus musculus

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35 40 45
Val Ser Trp Ala Lys Val Ser Glu Ser Gly Thr Glu Ser Val Glu Leu
50 55 60
Pro Glu Ser Lys Gln Asn Ser Ser Phe Glu Ala Pro Arg Arg Arg Ala
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Sequence Listing

65		70		75	80
Tyr	Ser	Leu	Thr	Ile	Gln
		85	Asn	Thr	Thr
				90	Cys
					Ser
					Ser
					Gly
					Thr
					95
Arg	Cys	Ala	Leu	Gln	Glu
		100	Leu	Gly	Gly
				105	Gln
					Arg
					Asn
					Leu
					110
Val	Val	Leu	Lys	Val	Thr
		115			Gly
					Cys
					120
					Pro
					Lys
					Glu
					Ala
					125
					Thr
					Glu
					Ser
					Thr
					95
Phe	Arg	Lys	Tyr	Arg	Ala
		130			Glu
					Ala
					135
					Val
					Leu
					Leu
					140
					Phe
					Ser
					Leu
					Val
					Val
					140
Phe	Tyr	Leu	Thr	Leu	Ile
					150
					Ile
					Phe
					Thr
					Cys
					155
					Lys
					Phe
					Ala
					Arg
					Leu
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Ser	Ile	Phe	Pro	Asp	Ile
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					Ser
					Lys
					Pro
					170
					Gly
					Thr
					Glu
					Gln
					Ala
					175
					Phe
					Leu
					175
Pro	Val	Thr	Ser	Pro	Ser
					180
					Lys
					His
					185
					Leu
					Gly
					Pro
					Val
					Thr
					Leu
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					Pro
					Lys
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 <212> DNA
 <213> Artificial Sequence
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 <223> Description of Artificial sequence: primer for CD83ext

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 sequence of pGEX2ThCD83ext
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 <222> (1)..(417)
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 <222> (28)..(417)

Sequence Listing

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 GTG AAG GTG GCT TGC TCC GAA GAT GTG GAC TTG CCC TGC ACC GCC CCC 96
 VAL LYS VAL ALA CYS SER GLU ASP VAL ASP LEU PRO CYS THR ALA PRO
 TGG GAT CCG CAG GTT CCC TAC ACG GTC TCC TGG GTC AAG TTA TTG GAG 144
 TRP ASP PRO GLN VAL PRO TYR THR VAL SER TRP VAL LYS LEU LEU GLU
 GGT GGT GAA GAG AGG ATG GAG ACA CCC CAG GAA GAC CAC CTC AGG GGA 192
 GLY GLY GLU GLU ARG MET GLU THR PRO GLN GLU ASP HIS LEU ARG GLY
 CAG CAC TAT CAT CAG AAG GGG CAA AAT GGT TCT TTC GAC GCC CCC AAT 240
 GLN HIS TYR HIS GLN LYS GLY GLN ASN GLY SER PHE ASP ALA PRO ASN
 GAA AGG CCC TAT TCC CTG AAG ATC CGA AAC ACT ACC AGC TGC AAC TCG 288
 GLU ARG PRO TYR SER LEU LYS ILE ARG ASN THR THR SER CYS ASN SER
 GGG ACA TAC AGG TGC ACT CTG CAG GAC CCG GAT GGG CAG AGA AAC CTA 336
 GLY THR TYR ARG CYS THR LEU GLN ASP PRO ASP GLY GLN ARG ASN LEU
 AGT GGC AAG GTG ATC TTG AGA GTG ACA GGA TGC CCT GCA CAG CGT AAA 384
 SER GLY LYS VAL ILE LEU ARG VAL THR GLY CYS PRO ALA GLN ARG LYS
 GAA GAG ACT TTT AAG AAA TAC AGA GCG GAG ATT TGAGAATTCA TCGTGACT 435
 GLU GLU THR PHE LYS LYS TYR ARG ALA GLU ILE
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 <223> Description of Artificial Sequence: partial
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 TRP ASP PRO GLN VAL PRO TYR THR VAL SER TRP VAL LYS LEU LEU GLU
 GLY GLY GLU GLU ARG MET GLU THR PRO GLN GLU ASP HIS LEU ARG GLY
 GLN HIS TYR HIS GLN LYS GLY GLN ASN GLY SER PHE ASP ALA PRO ASN
 GLU ARG PRO TYR SER LEU LYS ILE ARG ASN THR THR SER CYS ASN SER
 75 80 85

Sequence Listing

Gly Thr Tyr Arg Cys Thr Leu Gln Asp Pro Asp Gly Gln Arg Asn Leu
90 95 100

Ser Gly Lys Val Ile Leu Arg Val Thr Gly Cys Pro Ala Gln Arg Lys
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Glu Glu Thr Phe Lys Lys Tyr Arg Ala Glu Ile
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sequence of pGEX2ThCD83ext_mut129_Cto5

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gtg aag gtg gct tgc tcc gaa gat gtg gac ttg ccc tgc acc gcc ccc 96
Val Lys Val Ala Cys Ser Glu Asp Val Asp Leu Pro Cys Thr Ala Pro
10 15 20
tgg gat ccg cag gtt ccc tac acg gtc tcc tgg gtc aag tta ttg gag 144
Trp Asp Pro Gln Val Pro Tyr Thr Val Ser Trp Val Lys Leu Glu
25 30 35
ggt ggt gaa gag agg atg gag aca ccc cag gaa gac cac ctg agg gga 192
Gly Gly Glu Glu Arg Met Glu Thr Pro Gln Glu Asp His Leu Arg Gly
40 45 50 55
cag cac tat cat cag aag ggg caa aat ggt tct ttc gac gcc ccc aat 240
Gln His Tyr His Gln Lys Gly Gln Asn Gly Ser Phe Asp Ala Pro Asn
60 65 70
gaa agg ccc tat tcc ctg aag atc cga aac act acc agc tgc aac tcg 288
Glu Arg Pro Tyr Ser Leu Lys Ile Arg Asn Thr Ser Thr Ser Asn Ser
75 80 85
ggg aca tac agg tgc act ctg cag gac ccg gat ggg cag aga aac cta 336
Gly Thr Tyr Arg Cys Thr Leu Gln Asp Pro Asp Gly Gln Arg Asn Leu
90 95 100
agt ggc aag gtg atc ttg aga gtg aca gga tcc cct gca cag cgt aaa 384
Ser Gly Lys Val Ile Leu Arg Val Thr Gly Ser Pro Ala Gln Arg Lys
105 110 115
gaa gag act ttt aag aaa tac aga gcg gag att tgagaattca tcgtgact 435
Glu Glu Thr Phe Lys Lys Tyr Arg Ala Glu Ile
120 125 130

Sequence Listing

<210> 10
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 <212> PRT
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: partial
 sequence of pGEX2ThCD83ext_mut129_CtoS

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 Val Lys Val Ala Cys Ser Glu Asp Val Asp Leu Pro Cys Thr Ala Pro
 10 15 20
 Trp Asp Pro Gln Val Pro Tyr Thr Val Ser Trp Val Lys Leu Leu Glu
 25 30 35
 Gly Gly Glu Glu Arg Met Glu Thr Pro Gln Glu Asp His Leu Arg Gly
 40 45 50 55
 Gln His Tyr His Gln Lys Gly Gln Asn Gly Ser Phe Asp Ala Pro Asn
 60 65 70
 Glu Arg Pro Tyr Ser Leu Lys Ile Arg Asn Thr Thr Ser Cys Asn Ser
 75 80 85
 Gly Thr Tyr Arg Cys Thr Leu Gln Asp Pro Asp Gly Gln Arg Asn Leu
 90 95 100
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 Glu Glu Thr Phe Lys Lys Tyr Arg Ala Glu Ile
 120 125 130

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32

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<210> 13

Sequence Listing

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<212> PRT

<213> Homo sapiens

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Ala Tyr Ser Leu Ala Pro Ala Thr Pro Glu Val Lys Val Ala Cys Ser
20 25 30

Glu Asp Val Asp Leu Pro Cys Thr Ala Pro Trp Asp Pro Gln Val Pro
35 40 45

Tyr Thr Val Ser Trp Val Lys Leu Leu Glu Gly Gly Glu Glu Arg Met
50 55 60

Glu Thr Pro Gln Glu Asp His Leu Arg Gly Gln His Tyr His Gln Lys
65 70 75 80

Gly Gln Asn Gly Ser Phe Asp Ala Pro Asn Glu Arg Pro Tyr Ser Leu
85 90 95

Lys Ile Arg Asn Thr Thr Ser Cys Asn Ser Gly Thr Tyr Arg Cys Thr
100 105 110

Leu Gln Asp Pro Asp Gly Gln Arg Asn Leu Ser Gly Lys Val Ile Leu
115 120 125

Arg Val Thr Gly Cys Pro Ala Gln Arg Lys Glu Glu Thr Phe Lys Lys
130 135 140

Arg Arg Ala Glu Ile Val Leu Leu Leu Ala Leu Val Ile Phe Tyr Leu
145 150 155 160

Thr Leu Ile Ile Phe Thr Cys Lys Phe Ala Arg Leu Gln Ser Ile Phe
165 170 175

Pro Asp Phe Ser Lys Ala Gly Met Glu Arg Ala Phe Leu Pro Val Thr
180 185 190

Ser Pro Asn Lys His Leu Gly Leu Val Thr Pro His Lys Thr Glu Leu
195 200 205

Val
209